interna is prolonged upon the capillaries in the form of a sheath, which is wide and funnel-like at first, but soon embraces the vessels so closely as to become indistinguishable from their proper wall; so that, notwithstanding the existence of a sheath, there is no perivascular space about the retinal capillaries, such as His has described in the brain or spinal cord, and has stated to occur in the retina and elsewhere.

In all other mammals, except the hedgehog, as far as my present knowledge extends, the arteries, veins, and capillaries lie in the retina. In fish, amphibia, reptiles, and birds, however, as H. Müller and others (myself as regards amphibia and reptiles) have shown, the retina is absolutely nonvascular, the absence of proper retinal blood-vessels being compensated for in fish, amphibia, and some reptiles by the vascular net which in these animals channels the hyaloidea, and by the highly vascular pecten present in other reptiles and in birds. Thus it is possible to divide vertebrates into two classes. according as their retina is vascular or non-vascular; and these classes would be connected by the hedgehog, the larger branches of whose vasa centralia, lying upon the membrana limitans in intimate relation with the hyaloidea, represent the equivalent vessels of the hyaloid system, which forms so exquisite a microscopic object in the frog; whilst the capillary vessels channelling the retinal tissues occupy the same position which they do in most mammalia.

## MISCELLANEOUS.

On the Origin of the Name "Penguin."

To the Editors of the Annals and Magazine of Natural History.

GENTLEMEN,—More than ten years ago it occurred to me that the name "Penguin" or "Pengwin," applied to certain sea-fowl which are unable to fly, was a corruption of "pen-wing" or "pin-wing," meaning a bird that had apparently undergone the operation of pinioning or "pin-winging," as it is, in at least one part of England. commonly called. Lately Mr. Henry Reeks, who has been successfully pursuing the investigation of natural history in Newfoundland. has kindly informed me that in that country the name "Penguin" used there to signify the Alca impennis of Linnaus, is invariably pronounced "Pen-wing;" and this fact seems to confirm the supposition I had formerly entertained. I shall be greatly obliged to you by allowing me to mention in your pages this suggestion, which, so far as I am aware, has not been before published, especially as neither of the only two derivations of the name which I have seen assigned—the first from the Latin pinguedo (fatness), the second from the Welsh pen gwyn (white head)—appears to me at all probable. I am, Gentlemen,

Your obedient Servant,
ALFRED NEWTON.

Bloxworth, July 22, 1869.